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ORIGINAL ARTICLES.

A SUCCESSFUL CASE OF TRACHEOTOMY FOR DIPHTHERIA.*

By W. R. Cluness, M. A., M. D., Sacramento, Cal.

Tracheotomy, when performed for laryngeal diphtheria, is so rarely successful that I am induced to report briefly the salient points in a case which recently came under my care.

Referring to the fatality of this form of the disease, after operation, Prof. Jacobi says: "The percentage of recoveries is reduced to such a low figure that only the utter impossibility of witnessing a child's dying from asphyxia has goaded me on to the performance of tracheotomy." And I am sure that the experience and observation of each one of you are corroborative of his. For my own part, I confess to having entertained at all times, but especially as my experience increased, the most serious apprehensions as to the result, as well as misgivings regarding the utility of the operation. Heretofore my operations numbered but eight, yet they all terminated disastrously, as follows:

In the first case, death resulted within twenty-four hours from asphyxia, in consequence of the attendant having allowed the inner tube to become suddenly filled with secretions, and having lost his presence of mind when the little sufferer commenced to struggle for air. My second and third cases died from the constitutional effects of the disease. In the fourth case the trachea was found to be so completely filled with diphtheritic deposit as to render the completion of the operation worse than useless. My fifth case died of pneumonia on the fifth day, after presenting the most encouraging hopes of a favorable issue. The sixth was one of unusual interest, and at times great hopes of recovery were entertained, yet she died of exhaustion on the fifth day after

^{*} Read before the Sacramento Society for Medical Improvement.

the operation, and the eleventh of the disease. My seventh case died, as I believed, of general blood-poisoning, although one of the medical gentlemen in consultation entertained the belief that death resulted from occlusion of the trachea below the opening. My eighth case died from pneumonia on the third day; and this, my ninth case, I am happy to say, made

a very good recovery.

The patient, a boy between five and six years of age, had been "croupy," for several days, but as he had been frequently attacked with croup on former occasions, and had been readily relieved by emetics of syrup of ipecac., together with the usual addenda of domestic treatment, no medical attention was deemed necessary until it became apparent that he was in imminent danger of suffocation. There was no deposit visible in the pharynx, or upon any part of the fauces, or in the nostrils, nor was there any apparent constitutional disturbance. The difficulty experienced by the child, however, in both inspiration and expiration, was convincing evidence of the presence in the larynx of a membranous exudation which was rapidly inducing stenosis, and the parents were accordingly advised of the impending danger. Emetics of the yellow sulphuret of mercury were administered for the purpose of ridding the pharynx of the accumulating mucous, and appropriate doses of the tincture of chloride of iron, with the bichloride of mercury in glycerine and water were ordered. The vapor of unslacked lime was also ordered to be freely inhaled.

On the following morning there was no perceptible improvement, although it could not be said that there was an increased difficulty in respiration. A few small spots, however, could be seen upon the left tonsil, having the appearance of approaching ulceration rather than of diphtheria. The same general condition was maintained during the foremoon, but during the afternoon there was a gradual change for the worse, and by ten o'clock it became apparent that

more radical measures must soon be adopted.

At five o'clock A. M. of the following morning I was hastily summoned, and at eight o'clock Drs. W. A. Briggs and W. H. Baldwin were called in consultation at the request of the parents, when it was decided that tracheotomy offered the only hope of saving the life of the child. The operation was accordingly performed, and in a few moments the child

breathed freely, there being no evidence of diphtheritic deposit at or below the point of insertion of the tube. The constitutional and local treatment already described were continued, with the exception of the substitution of the inhalation of lime water by means of the atomiser for the fumes of unslacked lime, and with but slight interruption the case progressed favorably until the eighth day, when the tube was removed on account of the irritation it occasioned in the trachea, and because it was observed that a small amount of air could be forced through the larynx during expiration.

On the ninth day after the operation the right nostril was observed to be filled with characteristic diphtheritic deposit, and upon the following day a deposit of like character was seen in the left nostril, both of which yielded to appropriate treatment in four days. The edges of the wound slowly coalesced, as the deposit in the larynx softened and admitted of natural respiration, and on the morning of the fourteenth

day no air could be observed to pass through it.

This case, it occurs to me, presents several points of special interest, for at no previous time during my professional career, of nearly thirty years, had I entertained any doubts of the identity of membranous croup and diphtheria, nor had the gentlemen who were in consultation with me; yet here was a case in which there had been little or no constitutional disturbance, and in which a few small suspicious looking patches upon one tonsil, which readily disappeared after two or three applications of a preparation of subsulphate of iron, carbolic acid and glycerine, were the only evidences of diphtheria that could be observed. The appearance, however, of the deposit in the nostrils, and the subsequent development of paralysis of the muscles of deglutition left no doubt upon our minds that we had been dealing with diphtheria, and that however much the clinical symptoms may differ, histologically and anatomically diphtheria and membranous croup are identical.

On this subject Jacobi says: "It is just as little possible to differentiate these diseases according to the seat of the morbid product, as it is justifiable to deny the title diphtheria to membranous pharyngitis when few general symptoms such as fever, debility, and collapse happen to be present." And Senator says: "These diseases differ in degree, although identical in character."

Another point of much interest appeared to have been well illustrated in this case, viz.: the local nature of the attack. The child had been observed to be croupy, and unable to make distinctly audible sounds for several days; no febrile manifestations whatever were present until some time after I had seen him, and then to a very slight degree, and the evidences at all times pointed to the vocal cords as the original and principal seat of the membranous deposit. In view of these facts can it be imagined that the local deposit was but the expression of the constitutional taint, as maintained by some members of this society? Most assuredly it cannot; for let it be recollected that these cords are covered with pavement epithelium; that they possess neither muciparous follicles nor lymphatic vessels, and that, consequently, no constitutional or general infection can take place so long as the deposit is confined to them. The converse must also hold good, for it is inconceivable that such tissue would be selected by the processes of nature when the entire mucous tract of the system presents such inviting soil for the development of the morbid product. In the case under consideration there was no evidence of general taint for a considerable length of time after the presence of local trouble became manifest, and then only in a very slight degree, and probably not at all until the deposit had extended to a point in the pharynx in which lymphatics exist. The truth doubtless lies between the two propositions, the disease having somtimes a local and at others a constitutional origin.

It is also worthy of observation that the onset in this case took place at a period when we may be said to have been near the close of a mild epidemic of diphtheria, and that that condition of atmosphere which favored the development of the disease in its severer forms had passed away, thus rendering the virus less active and the individual less susceptible. It should also be remembered that "one of the pathognomonic symptoms of diphtheritic laryngitis is the relative absence of fever, and that sudden attacks of croup, with high temperature—provided there is no pharyngeal or other diphtheria present—yield a good prognosis; without much fever.

a very doubtful one."

OBSTETRIC MEMORANDA.

ABSENCE OF LIQUOR AMNII.

Mrs. —, primipara, aged twenty-seven, has been married seven years. In June, 1887, was engaged to attend her in confinement. She dated the cessation of last menstruation October 11, 1886. I told her she might look for her accouchement on or about July 15, 1887. Time passed till July 24th, when, at 7 A. M., I was called out into the country

five miles to see my patient.

Upon examination, found head engaged in pelvic brim, os dilated to about the size of half a dollar; could feel the membranes, but was unable to distinguish any water; pains about an hour apart, weak and ineffective; no backache; allowed patient to get up and walk about, and assume any position which afforded comfort. At 6 p. m. pains more frequent, no advance of head, os dilated to size of a dollar, membranes still covering, presenting head, but no bag of water; gave $\frac{1}{2}$ gr. morphia sulphate in $\frac{1}{8}$ gr. doses, between 6 p. m. and 7 o'clock next morning. This relieved the suffering and allowed some rest during the night, pains being less frequent and although stronger still ineffectual. At 8 a. m. os double size of previous evening, head a little lower, membranes had receded from touch.

On inquiry, as to what time the water came away, I was informed it had not escaped. I also learned that patient had not felt quickening till about end of sixth month; from that time she felt slight fætal movements, which would occasionally be absent for three or four days. Six weeks previous to onset of labor a vaginal discharge began which at times would be watery, at others milky, varying in consistency and appearance. For the last few days there had been very little discharge. Upon palpation the fætus imparted the sensation of a dead weight instead of the normal sensation when floating freely in the amniotic fluid.

From the above facts I concluded that the long-continued vaginal discharge was the liquor amnii escaping, which accounted for its absence and the tedious nature of the case.

Morphia still required occasionally; at 1 o'clock pains were weak, ineffectual, and cramp-like; at 2 p. m., there being no change for the better, I concluded to deliver her, as she was growing weak, and I feared that the long-continued pressure

of the fætal head might be followed by sloughing. When fully etherised I applied the forceps (Simpson's long) with the blades to side of fætal head, and delivery was effected without much trouble. The cord was twice around the neck. This being released there was some delay in delivering the shoulders. The child was apparently dead, but after a faithful trial of artificial respiration it breathed freely. After waiting forty-five minutes and trying external manipulation with slight traction on the cord, I introduced my hand and found the placenta firmly adherent to the fundus; having peeled it off it was easily removed. Gave patient half drachm fluid extract of ergot, which was repeated twice daily for four days, during which time she had two antiseptic vaginal irrigations daily. On the third day the temperature reached 99.50, but was normal next day. Mother and child have done remarkably well.

How fortunate are our city colleagues who can have consultation in cases that are the least serious, and so share the responsibility; but in country practice we cannot always

have consultation when we would like it.

Lower Lake, Cal.

M. A. CRAIG, M. D.

DEPARTMENTS.

OBSTETRICS, DISEASES OF WOMEN AND OF CHILDREN.

By WALLACE A. BRIGGS, M. D.,

Salpingitis.—M. Cornil read a report relating to a work by M. Terrillon, based upon four observations of inflammation of the uterine annexæ, and upon laparotomy performed in each of these cases. He admits, with M. Terrillon, the existence of vegetating catarrhal salpingitis, purulent salpingitis, salpingitis with hæmorrhage, and tubercular salpingitis; M. Cornil would add blenorrhagic salpingitis to these varieties. The tube is nearly always more affected than the ovary. In the cases observed by M. Terrillon, the lesions were actually begun by pelvic peritonitis, and were characterized by vegetating, chronic, catarrhal or purulent salpingitis, or by hæmorrhage, with peritoneal obstruction of the tube. The operation is then indicated by loss of function of the ovary and the tube.—Progres Medical, July 30, 1887.

Accidents from Intrauterine Injections during the Puer-Perium.—1. After a normal pregnancy and delivery, Mrs. B— passed an easy night, and at nine the next morning everything was going well. I gave her, however, an intrauterine injection of Van Swieten's solution, 1:4. The liquid returned well and I left the patient in a satisfactory condition. Half an hour after, she was seized with a chill, bilious vomiting and pain in the loins and abdomen. I prescribed iced champagne with extract of opium hourly. At three o'clock the condition of the patient had improved, but her pulse was still 120. At nine the next morning the patient was comfortable, and there remained but slight sensitiveness of the abdomen. I repeated the intrauterine injection with the same precautions and the same solution as previously, and with the same result—malaise, chill, vomiting, abdominal pain. Two days later the patient was convalescent.

2. The morning after an easy instrumental delivery Dr. Roulin administered an intrauterine injection of Van Swieten's solution, 1:4. The liquid returned freely, and the patient complained of neither pain nor malaise. The following morning a canula of small calibre was introduced with ease, but as the solution did not return this canula was withdrawn and a larger one inserted. Still the solution did not escape freely; suddenly the patient was taken with violent pain in the abdomen. The canula was immediately withdrawn, but the pain increased in severity, occupying the left iliac fossa especially. Slight retching without vomiting. Opium with poultice to the abdomen. The pain was increased with slight pressure, and persisted until eleven o'clock without remission. From this time the pain became intermittent and less severe, and by evening it had nearly disappeared. The patient recovered without further accident.

3. The day following delivery Mrs. G—— was in a most satisfactory condition. Nevertheless, I gave her an intrauterine injection—Van Swieten's solution, 1:4 with Budin's canula. During the manipulation the patient was suddenly seized with pain in the abdomen. I discontinued the injection at once, and yet she writhed in colic all the rest of the day, without tympanites, without suppression of the lochia, without diarrhea, without chill. The next morning

the symptoms were entirely relieved.

4. In the case of Mrs. Q —— I was obliged to use the forceps on account of inadequate uterine contractions. After delivery she seemed in perfect condition, except that her pulse was slightly accelerated and her face slightly flushed. Next morning, notwithstanding these symptoms had entirely disappeared, and the patient was in perfect health, I administered an intrauterine injection—this time, however, with a solution of chloral, 1:100. The liquid returned by the canula freely and brought with it a large clot. The operation was scarcely over when the patient complained of violent pain in the loins and abdomen, of faintness and blindness. These symptoms quickly subsided, but returned in half an hour, when a severe chill set in. The pulse was frequent, the temperature 39.5°. The pain soon subsided again, and the temperature gradually fell and became normal on the sixth day.

From these observations it follows: That intrauterine injections may produce accidents, since the outset the course and the termination of the cases described are not consistent with any other expla-That these accidents are characterized by chill, vomiting and abdominal pain. That these symptoms may all be present in the same case, or that one or more may be absent; and that in duration, intensity and course they are variable. That hitherto these accidents have always had a favorable termination. That they are independent of the nature and quantity of the liquid injected. That they seem due to the introduction of the canula, and may be compared to those observed after catheterization of the urethra or of the That in the cases whose history I have reported, these symptoms have occurred nearly always—perhaps always in women tainted more or less remotely with rheumatism; that this is, however, That for these reasons it seems wise to restrict a mere coincidence. the use of intrauterine injections to cases in which they are positively indicated.—L. Roulin in L'Union Medicale, Sept. 3, 1887.

The Treatment of Vaginismus.—Dr. Madden regards vaginismus, in the majority of cases, as the local expression of a general neurosis, or of hysteria. In rare cases only is there a pathological condition of the pudic nerve. His treatment consists of warm baths, vaginal injections, the local application of a five per cent. solution of cocaine or of carbolic glycerine (5-100), or the introduction of cocaine or belladonna suppositories. In only one-tenth of his cases was he compelled to adopt operative measures. These consist of forcible dilatation, repeated if necessary, and, if this fails, of Sims' operation.—Dublin Journal Medical Science.

TREATMENT OF PROLAPSE OF THE RECTUM IN SMALL CHILDREN—DR. BETZ ("Memorabilien," xxxi.) recommends the following treatment, with which he has been successful in a case that had resisted all other measures: Apply to the prolapse a solution of argent. nit. (1) in arth. sulph. (5) and sprit. vin. (25); replace the bowel and introduce a pencil of alum; press the nates well together, and apply adhesive strips to prevent the return of the prolapse. Control tenesmus by opiates and meagre diet.—Schmidt's Jahrbuecher, Bd. 214, Hft. 6.

SURGERY AND PATHOLOGY.

By T. W. HUNTINGTON, M. D, Surgeon, Southern Pacific Company's Hospital.

TWELVE FOREIGN BODIES REMOVED FROM STOMACH AND INTESTINES BY GASTROTOMY AND ENTEROTOMY.—DR. RADESTOCK reported the following operation, which had been performed by Setzner. A twenty-two-year-old criminal, who had survived a previously attempted suicide by opening the veins of his arm, swill, on the 10th of November, 1886, a piece of glass five fingers and length, and a piece of wood, from the window-frame of his cell, ten fingers long

and as thick as the thumb. Several days later he had pain, constipation and vomiting. Sixteen days later the foreign bodies were detected in the abdomen. On the 8th of December laparotomy was performed. The fingers introduced into the abdominal cavity came in contact with intestine, tense and filled by foreign bodies, which extended for 25 cm. and felt as if pressed against each other. The foreign bodies were removed through an incision 4 cm. long, which was then intimately united. Foreign bodies were also felt in the great curvature of the stomach. The laparotomy wound was then united and gastrotomy performed. An incision six cm. long close to the border of the ribs was made, down to the stomach, and the great curvature opened by a cut four cm. in length. Six pieces of wood splinters were extracted. Fragments of glass were not found either in stomach or bowels. The wounds in the stomach were united. Good healing followed. Soon after discharge the patient again swallowed wood splinters, which were felt in the abdomen. The old laparotomy wound was reopened, and also the intestine which was highly inflamed and thinned by the foreign bodies. It contained three pieces of fir wood, $9\frac{1}{2}$, 10 and $10\frac{1}{2}$ cm. long and as thick as a finger, one of which was wound with twine. The wound united and resulted in perfect recovery .- Arch. f. klin. Chir., Schmidt's Jarbuecher, Bd. 215, Hft. 8.

Chronic Hydrarthrosis cured by Irrigation with Carbolic Solution.—Dr. L. Michalski describes a case which he treated in this manner, as follows: The patient, a soldier, aged 24 years, had a large swelling of the right knee; he had been two months in hospital at Nancy, where he was treated with counter-irritants and vesicants, the joint being twice aspirated. These means having failed, a plaster bandage was applied and kept in place for ten days. When first seen (April 24, 1886) there was considerable swelling, but a certain degree of mobility was still possible. The failure of all measures so far suggested a repuncture, followed by injection of iodine, which was at first accepted, but subsequently, yielding to the advice of friends, he refused to submit, and for two months, during which time he was not under observation, adopted various measures which were recommended to him.

He was next seen on June 15th. The disease had increased and the swelling had attained enormous proportions, extending from the lower third of the calf to the external aspect of the thigh above, and measuring over 20 cm. in circumference at the knee. His general condition was bad. He had fever, loss of appetite, and slept badly. On the 17th the cavity was aspirated at the external aspect of the thigh, withdrawing a litre of thick fluid of a reddish brown color; this was followed by an injection of iodine (tincture of iodine, distilled water to 250 gm.; iodide of potassium, 10 gm.) the joint was fixed to get ressing of antiseptic wool. His condition being most satisfactory, he was not seen until the 24th, when it was found that

he had been worse for the two previous days. He presented all the phenomena of septic infection; the pulse was so frequent that it was impossible to count it. The wound from the trocar had not closed, and an unhealthy sero-purulent discharge escaped from it. The cavity was at once irrigated with carbolic solution, about two per cent., until the fluid emerged clear. The pulse diminished in frequency almost immediately, and was estimated at 140. An antiseptic dressing was applied and quinine given internally. Next day the patient was better; pulse 120; same treatment continued, the injections being given morning and evening. On the 26th his condition was satisfactory: appetite returning, pulse 100. June 28th the patient continued to improve; the injections were given regularly twice daily, and to facilitate the process a counter opening was made on the internal aspect of the leg and a drainage tube inserted. Recovery continued without any incident; the fever disappeared, appetite returned and the patient got up, the quantity of fluid employed being decreased daily. He was last seen July 19th, and returned to his regiment on the 15th of October. -L'Union Medicale, August 18th, 1887.

A CASE OF HERNIA WITH FÆCAL ABSCESS.—DR. A. GONDOUIN reports a case of obscure origin, which was followed by rapid recovery. On May 17th, 1887, he was called to see a woman, aged 77, who had been suffering from pain in her right groin for fifteen days. On examination an inflammatory swelling, about the size of a large hen egg, was found. The tumor occupied the crural region at the usual site of crural hernia. The surface was covered with a thin, dry eschar, about 5 cm. in diameter. This was surrounded by reddened and edematous integument; a small sinus existed inferiorly. On palpation there was a distinct sense of fluctuation with crepitation, the pressure causing a flow from the orifice of greenish fætid pus, mixed with bubbles. On removing the eschar a cavity was found, filled with greenish yellow pus and gangrenous debris, horribly fætid, apparently a fæcal abscess. On clearing the cavity of necrosed tissue and purulent matter with which it was filled, it presented the appearance of a deep excavation, the rounded and gaping orifice of which was almost 5 cm. in diameter and occupied the crural region on a level with the cribriform fascia, which was entirely destroyed. The cavity corresponded to the infundibulum, the cellular tissue and glands of which had completely disappeared in the process of necrosis; at the bottom it narrowed into a funnel almost under the crural arch, and at this point was situated the fistulous orifice which allowed the fæcal matter to escape. as to the formation of this abscess the patient stated that for a long time she had had a small hernia in the right groin. She had never worn a truss nor experienced the least inconvenience from it. For fifteen days she had noticed a slight pain in that region, and she also noticed a swelling which did not disap-

pear, and which became more and more painful. Meanwhile she attended to her household duties; there was no vomiting, the bowels were moved every two or three days, which was habitual. During the last six days the pain had become more severe, though there was still no vomiting, and the bowels acted regularly. The appearance of the tumor, and the fact that she was losing strength induced her to seek medical aid. The dressing during the first two days consisted of solution of permanganate of potash, 1-1000, and potato poultices moistened with the same fluid. The gangrenous odor having disappeared, the dressing was replaced on the third day by wadding, impregnated with bichloride solution 1-2000 covered with oil silk, irrigations with the same solution. For the first eight days the dressings were saturated with fæcal matter, but the discharge gradually lessened and disappeared by the fifteenth day. Healing took place with great rapidity, and five weeks from the date of the first observation cicatrization was complete. The author, commenting on the origin of the abscess, believes that the trouble was due to a fæcal accumulation in the hernia, complicated by the presence of a foreign body, as it was hardly probable that a great degree of inflammation could exist in the hernia which had always been easily reducible, and when there had never been a symptom of strangulation.

An editorial comment on the report says that while the presence of a foreign body would explain the fact of a perforation without any of the symptoms of strangulation, yet this accident usually takes place in the vermiform appendix. The commentator thinks that the phenomena in the case were due to a pinching (pincement) of the bowel as is sometimes seen in small crural hernias. This strangulation of a part of the circumference of the intestine is not very rare, and while capable of producing the gravest consequences, can also end in resolution by an abscess opening externally.—L'Union Medi-

cale, August 13, 1887.

TREATMENT OF BURNS AND SCALDS.—The "Journal of the American Medical Association," August 20, 1887, contains the following from the "London Medical Record": PROFESSOR MOSETIG, during the last five years, has treated with iodoform forty-eight severe cases of burns and scalds with the most satisfactory results. The danger of iodoform intoxication in burns, he believes, is merely theoretical, as neither he nor others who treated burns with iodoform had, when using certain precautions, ever met with bad concomitant effects. The action of iodoform is two fold; it is both analgesic and antisep-The patients, according to Dr. Mundy's experience, which Prof. Mosetig fully confirms, obtain ease a few minutes after the application of iodoform to their burns, and are soon fit to be moved. patients in Prof. Mosetig's wards repose quietly and without pain, in their beds; they recover more rapidly with only moderate and consequently less exhausting discharges, and with smoother cicatrices, than those differently treated; and if there is no possibility of saving the life, euthanasia is at least secured. Iodoform, although inert against the dangers of life from oligocythæmia and nervous shock, guards against the dangers of sepsis. Prof. Mosetig uses iodoform in limited quantities only. He usually does not employ the powder; when used he distributes it in a thin layer by means of an insufflator on those places where the integument has been burnt in its whole thickness. As a rule, he covers the injured parts directly with compresses of iodoform gauze. The gauze is prepared by immersing the purified gauze in an ethereal solution of iodoform. After opening and excising the vesicles, and cleansing the surface with cotton wool, he covers the wounds with dry compresses, consisting of several layers of the gauze, of sufficient size to cover exactly the affected surface. Over this is laid a piece of gutta-percha tissue, not larger than the compress. The whole is enveloped in a generous layer of absorbent cotton, which is held in place by a carefully adjusted roller. This simple dressing is allowed to remain without change as long as possible, i. e., as long as cleanliness permits, and no rise of temperature takes place.

At the S. P. Co.'s Hospital this plan has been pursued for some-

time with uniformly excellent results.—H.]

TISSUE RESISTANCE AND ANTISEPTICISM.—The "British Medical Journal" of August 6, 1887, contains Edward Hamilton's address in surgery, entitled, "Tissue Resistance and Antisepticism," delivered before the recent meeting of the British Medical Association, of which the following is an abstract: "He who writes the history of the surgery of this Victorian era will find one or two cardinal facts of such vast and stupendous proportions as to dwarf all others in the influence which they have exercised on our surgical work. Facile princeps among these is the method known as the antiseptic system, still enveloped in clouds of uncertainty and misconception, notwithstanding the work which so many eager and enthusiastic inquirers have bestowed upon it, far indeed removed from any approach to tinality. It may not be unprofitable to determine what is the present actual condition of this system, and to ascertain its exact relation to our everyday work. For, after all, it must come to this important question: What help does antisepticism afford to the daily practise of surgery? No honest or impartial observer can fail to recognize, with a deep sense of gratitude, the magnificent results and the brilliant success which have attended the Listerian system results which have led to its adoption throughout the civilized world -- results which have reorganized surgical methods and given a startling impulse to the operative treatment of injury or disease. yet with this triumphant record we find some of its most devoted adherents now relaxing the stringency of its application and abandoning parts of the system which were long regarded as essential, and that, too, without any diminution of successful results. Again, we find antiseptic precautions so little regarded, nay, almost set at

nought, as to prompt the ovariotomist to flush the peritoneum with water containing germs and spores and thirty different kinds of beasts, and yet point to a continuous record of success, little if at all inferior to the more complex method. After reviewing at some length the accepted theories concerning the existence of micro-organisms and the relation they bear to living and dead tissues, the author says: If the history which I have endeavored to sketch be true, it must commend itself to the ordinary understanding that it is our duty to destroy and exclude them from the body with all the care we possibly can, and if the means adopted for that purpose, call them Listerism, antisepticism, surgical cleanliness, or by what name you will—turn the scale a feather weight in favor of restoration to health or saving the life of a single human being—the man who refuses to employ them through prejudice or apathy incurs a responsibility nothing short of criminal.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D.

BICHLORIDE OF MERCURY IN INFECTIVE CONJUNCTIVITIS.—From clinical studies by Prof. Quaita.—In blenorrhoea neonatorum he uses a solution of nitrate of silver applied to the everted lids with a brush in the morning, washes the eyes out with a sublimate solution (1:7000) every two hours during the day, applying a sublimate (1:400-500), according to the condition of cornea, with the brush at night, and washing out the conjunctival sac again during the night. If the character of the disease has become milder after eight or ten days the nitrate solution can be weakened and the sublimate solution used less frequently. In conjunctivitis blenorrhæa, in grown people, he uses the bichloride solution (1:400) to the lids with a brush, combined with dusting, with iodoform powder, and binds the eyes with iodoform bandage. For prophylaxis against blenorrhæa neonatorum he uses a 1:500 solution of bichloride of mercury instead of nitrate of silver. In croupous and diphtheritic conjunctivitis, where sulphate of copper is contraindicated, the doctor uses a 1:400 solution of sublimate.

In granular conjunctivitis, in the simple form as well as in the classical trachoma, he finds the sublimate almost a specific. It destroys the lymphoid infiltration and retards the growth of new pathological follicles. The mucous membrane will thereby be protected from the further progress of the disease. It also assists in sterilizing the mucous secretions and thus lessening its contagiousness. In follicular conjunctivitis, one application daily with the brush, of a 1:500 solution and the use of 1:7000 solution applied two or three times a day with cloths. Later the applications can be weakened, and finally a solution of sulphate of zinc substituted. In genuine chronic trachoma, without severe corneal complications and intercurrent inflammatory attacks, one can radically cure the patient in three

months by daily use of a 1:400 sublimate solution and 1:7000 of the same applied a few times during the day by wet cloths. After a few weeks, weaker solutions can be used, and less frequently. The treatment is well borne even in corneal complications. In large granulations the application may be preceded by scarification of the conjunctiva.—Annali di Ottalmololgia. Centralblatt f. Augenheil.

The Influence of Sound and Vibrations of the Tuning Fork Upon the Eye.—At the last Russian Medical Congress M. Stein communicated the results of a series of experiments with prolonged action of the tuning fork in reference to provoking degenerative changes of certain tissues. As a unique result of his experience the speaker mentioned the more or less rapid production of cataract. These peculiar phenomena are not the result of sonorous vibrations transmitted through the central nervous system, as they are produced quite as rapidly when the internal ear is destroyed. They are, according to M. Stein, the result of the loss of heat, which is produced by the vibration of the tuning fork. These experimental cataracts disappear after a certain time and can be reproduced in the same animal.—Revue Clinique d'Oculistique.

Monolateral Mydriasis.—This disease, coming on without a known cause, is ordinarily dependent upon a uterine lesion, and more particularly on uterine fibroma. One can almost consider this symptom pathognomonic of that lesion. I am not aware that any one has called attention to this fact; it is many years since I have observed this coincidence. This nervous and reflex mydriasis which exists with or without paralysis of accommodation is always monolateral. It exists most frequently in women from twenty to thirty years of age, and it occupies the principle place among causes of monolateral mydriasis if we except the cases where mydriatics have been employed. Next in frequency come syphilitic and rheumatic mydriasis. I frequently observe monolateral mydriasis following the concussion of a blow upon the eye, and have seen it once produced by radiated heat after using red hot iron. Independent of treatment directed to the uterine lesion, I have in several cases in which eserine had failed, obtained complete recovery from injections of strychnine in the neighborhood of the eye .--- Dr. Mannhard in Klin. Monats. f. Augenheilkunde. Rev. Clin. d'Oculistique.

Notes on Simple Treatment of Panophthalmitis.—M. Chivert recommends the following method for shortening panophthalmitis from observation of eight cases: broad incision of cornea with flap downward, opening of capsule and extraction of lens. As soon as the discharge of pus ceases, all parts infiltrated with matter are removed with iris forceps, and intraocular irrigation with a sublimate solution of 1:2000. The two following days the irrigation is repeated, when the bandage is changed, and on the third day the patient can be discharged.—Arch. d'Ophth. Archives of Ophth., Sept., 1887.

IODOL; AN EFFECTIVE SUBSTITUTE FOR IODOFORM.—Iodol is very rich in iodine, containing only seven per cent. less than iodoform, but parts with it more readily than the latter substance. No toxic symptoms follow its constant use, and it is, therefore, preferable to iodoform, and also because it is quite as effective, and further, possesses neither smell nor taste. It is one of the best applications for ulceration of mouth, pharynx, larynx, and nose, ozena, scrofulous ulcerations, specific conditions, etc. The author can confirm the statements of Lublinski, that the ulcers of phthisical laryngitis will heal completely under daily insufflations of iodol. He uses the following preparations:

1. Insufflations of the pure powder. It is more important to cover the diseased surface than to measure the dose. 2. Mezzoni's solution; iodol, 1 part; alcohol, 16 parts; glycerine, 34 parts—a useful brush application, or coarse spray. 3. Iodol, 1 drachm; glycerine, 1 drachm; vaseline, 7 drachms—a brush application. 4. Pastilles of iodol; Iodol, 1 grain; glycerine, 1 minim; glycogelatine, 18 grains. These are preferable to iodoform pastilles, and are most serviceable of all for pharyngeal conditions. 5. Iodol, 1 drachm; ether, 1 ounce—a spray or brush application. 6. Iodol bougies containing ½ grain iodol in each, for nasal conditions. 7. Iodol wool, ten per cent. for tampons, etc. 8. Iodol gauze for dressings.

Iodol possesses all the properties of iodoform, is antiseptic, anæsthetic, a promoter of granulation and healing, arrests suppuration, deodorizes foul secretions, and is to be preferred to iodoform on account of its slight but pleasant odor and the absence of taste. Its effects are quite as rapidly obtained.—M. R. Norris in Practitioner—Journal of Laryngology.

Quinsy.—Dr. Easby, in a paper read at the February meeting of the Cambridge Medical Society on "Quinsy and its Treatment," after speaking of the old methods of antimonials, free purgation, complicated gargles, leeches and blisters, advised the use of aconite, given according to Dr. Ringer's method, or from ten to fifteen grains of salicylic acid or salicylate of soda given every two hours, which had invariably given speedy relief. Gargles were strongly condemned as both useless and cruel to the patient. As a local application, he had found that a powder consisting of equal parts of tannin and iodoform puffed on the swollen tonsils gave great relief to pain.—Journal of Laryngology.

THERAPEUTICS, DERMATOLOGY AND VENEREAL DISEASES.

By CROCKER SIMMONS, M. D.

RECENT IMPROVEMENTS IN THE THERAPEUTICS OF THE SKIN.—DR. G. P. Unna, in his address before the British Medical Association, calls attention to the increased absorptive powers of the diseased over the

healthy portions of the skin. To the superstition, that, in certain diseases of the skin, drugs are powerless, when the fault lies in the lack of proper applications of the drugs. To the fact that the acid and alkaline keratolytic agents, as salicylic acid on the one hand and caustic potash on the other, instead of being rivals are merely complimentary to one another. To the utility, as a means of treatment, of sprays, particularly of the oleates dissolved in ether, a field of dermato-therapeutics sadly neglected. To the mistaken idea that waterproof coatings present an insuperable obstacle to the watery vapor; and yet he admits that it would be inadvisable to completely shut up any large portion of the skin with glass or metal, since, by so doing, we would compel too great a compensatory effort on the part of the kidneys. He dwells upon the well known action upon the skin of an impermeable covering as gutta-percha. The skin becomes transmuted into a mucous like membrane; the centrifugal stream of secretion experiences a considerable obstacle by which the centripetal or absorptive stream is increased. Hence, if we wish the strongest and most rapid absorption of a given drug, we must use it on the skin under an impermeable covering. On the other hand, the least absorption of a given drug is procured by the use of pastes, gelatines and powders, for by their application the centrifugal, or stream of excretion, is increased in volume. The gelatines are recommended highly in all erythemas caused by (artificial) irritants, whether accompanied by cedema or not. Again the gelatines are of value in protecting those parts of the skin which we wish to preserve from the action of plaster mulls; as, for instance, the tissues surrounding corns or patches of lupus; and also to cover up the odor of unpleasant preparations as iodoform, balsam of Peru or tincture of tar. The glycerine gelatines, as a class, are contraindicated whenever a high temperature is present, or when sweating is profuse. The pastes are then preferable.

In regard to the second division of the new methods of dermatotherapeutics, the salve mulls, Unna remarks: that the more inflamed and obstinate affections, particularly chronic localized eczema, in all its forms, especially the eczema of children, make up the largest contingent for the treatment by salve mulls. In defining the third division or plaster mulls, he begins by describing what they are not. They are not made and recommended by nonmedical people, who have no idea of medical workings and the power of drugs, and who do not offer the slightest guarantee for the contents of the plasters. On the contrary, the plaster mulls have both the nature and quality of their contents properly prescribed by the medical man, and made up under a strict guarantee by a competent pharmacist, thus insuring accuracy in purpose. Again there is the entire absence of irritating bases so often found in the common plasters, as resin, turpentines, etc., the bases found most suitable for these plaster mulls being the purest India rubber, and the purified

oleate of aluminium. The strength of medicinal agent in this form of application (the plaster mull) is estimated by the amount which is spread on a unit of surface. Of these plaster mulls Unna refers especially to the mercury carbolic acid mull which he regards as of special value in all kinds of boils, abscesses, phlegmons, whitlows, parasitic sycosis, and buboes. Applied early, they have an abortive influence on suppuration; later, they ripen the process quickly, bringing about a painless opening of the abscess and promoting the closure of the wound.—British Medical Journal, August 27, 1887.

Percentage of Sterility Among Men.—Kehrer, of Heidelberg ("Weiner Presse," July 10, 1887), has examined 96 men as follows: Impotent, 3; having semen containing dead spermatozoa, 29; deficient spermatozoa, 11; excessive spermatic secretion, 53. The percentage of sterility is thus 33.32.—Medical Times.

Cyanide of Zinc in Cardiac Affections.—Prof. Lashkevitch finds that cyanide of zinc, or, as he terms it, "zincum hydrocyanidum sine ferro," has a peculiarly beneficial action on cases of palpitation and pain in the region of the heart, with want of proper rythm both when valvular disease is present and also when the symptoms depend on some neurosis. In the latter case, however, the action is more marked. In cases where digitalis, convallaria and other drugs commonly prescribed in cardiac affections, appear to irritate the abdominal viscera, cyanide of zinc has shown itself particularly valuable. The dose is one-tenth to one-eighth of a grain (the Russian grain is .96 of an English grain). This quantity is usually ordered three times a day. A very few doses usually produce a perceptible effect.—British Medical Journal, August 20, 1887.

Cocaine in Diabetes.—Dr. E. V. Weller writes in the "Medical and Surgical Reporter," August 27, 1887, of the value of cocaine in the polydipsic symptoms of diabetes. In the case recorded two drops of a four per cent. solution were given every three hours. In a few days the polydipsia disappeared, and the urine became almost normal in quantity.

LARVÆ IN THE HUMAN SKIN.—DR. MATAS, of New Orleans, reports an interesting case of an Englishman lately from Spanish Honduras, who, some weeks before, had been stung in three places. At the time of writing, these wounded portions of the skin had become inflamed and elevated, measuring one and one-quarter inches in diameter, with an elevation of a quarter of an inch. The removal of the larvæ was accomplished by excision and digital expression, and the furrow was found to be oblique in its direction. The size of the larvæ was about four or five mm. in length by one and one-half in breadth. A curious feature of this form of larval swelling is that on the most prominent part of the tumor there is a central orifice which becomes larger as the swelling progresses, affording a

means of respiration for the imbedded insect. The borders of the opening are usually incrusted with dessicated pus. When the larva has fully gorged itself with the pus its own presence has created, and when it approaches the time for its transformation into a chrysalis, it retreats backwards; its posterior extremity projects beyond the orifice; the whole body soon follows and then drops on the ground to complete its metamorphosis on the earth or preferably on the dung of its victim.—N. O. Medical and Surgical Journal, September, 1887.

ACID CALCIUM PHOSPHATE TREATMENT OF TUBERCULOSIS.—FREUND gives the following formulæ as used by Kolischer.

For hypodermatic injections, calci phosporici neutral, 5 parts.

For an escharotic effect upon tuberculous ulcers and indolent granulations, the following is used:

Add phosphoric acid until a perfect solution is obtained; filter; add Acid, phosphor. dil. 60 parts. Aq. distillat. q. s. add 1000 "

Gauze may be soaked in this fluid and used in dressing tuber-culous fistulæ and pockets.—Wein. Med. Presse.—Medical News.

A DIABETIC PILL.—"Les Nouveaux Remèdes," quoting from the "Archives de Pharmacie," says that Dr. VIGIER proposes to replace the lithiated arsenical water which Martineau has recommended in glycosuria of rheumatic origin, by the following pill:

Lithia carbonate, .10 gm.
Soda arseniate, .003 "
Extract gentian, .05 " M.

Make one pill. A pill to be taken morning and evening, and continued even after the sugar has disappeared from the urine. Dr. Vigier considers the pills to be a more practical method of administering the drug than the bulky water, which may not always be at hand.

RED OXIDE OF MERCURY AS A FURUNCULAR ABORTIFACIENT.—Dr. G. Jorissenne recommends ("Annales de la Société Médico-Chirurgicale de Liége") an ointment of the red oxide of mercury in the treatment of this troublesome affection. In 1881 he had used injections of a two per cent. solution of carbolic acid, but he regards this method as painful, and, where there is a number of furuncles, dangerous. For five or six years he has used the red precipitate in the treatment of styes. He usually prescribes an ointment, of lano-

line 10 gm., red precipitate 10 cg., rubbed lightly on the palpebral margin. He regards the morbid process in a boil as similar, and uses the same treatment with complete success. He rarely increases the strength of the application unless the furuncle is well advanced. He has seen small furuncles rapidly disappear after a single inunction of three or four minutes' duration, and large furuncles, measuring more than 2 cm. in diameter, have been aborted in one day after several inunctions.

IRON-ALUM IN GONORRHŒA.—The "Virginia Medical Monthly," speaks, editorially, of the value of Seven Springs, Va., iron-alum mass in the treatment of gonorrhœa. After eighteen months' experience, the writer concludes that it far exceeds any of the vaunted "specifics." It can be used in any stage of gonorrhœa or gleet. In forty cases there was only one decided failure. The quantity used is "about the equivalent in mass of two or three compound cathartic pills, in capsule three or four times daily." If this acts too freely on the bowels, diminish the dose so as not to induce more than two stools in twenty-fonr hours. If there is not at least one soluble stool a day, increase the dose slightly. Headache or "swimming sensations" can be averted by sodium bromide. If preferred, the mass is readily soluble in water.

MEDICINE.

Two Cases of Endocarditis due to Blenorrhea.—An officer, 32 years old, acquired gonorrhea on March 22, 1886. Four years previously he had suffered from a similar attack. On April 17th, he was taken with chill and fever, general malaise and a sensation of pressure about the heart. These unpleasant symptoms continued during the next few days with a moderate degree of fever. Increased intensity of heart pulsation, normal area of dulness, slight systolic murmur at apex of heart, slightly irregular pulse. The patient was improved on the 24th. The flow ceased, the heart murmurs disappeared, the pulse became regular. During the following week the urethral discharge was arrested, and the patient had recovered in every respect. The second case was a man who had been suffering from gonorrhea and had mitral insufficiency. He said that he had been suffering from the urethritis for three weeks, and also had had inflammation of the heart. No other explanation for the abnormal heart condition could be found but the gonorrheal inflammation. In neither case were there joint complications. -- Muench. med. Wochenschr.—Schmidt's Jahrbeucher, August, 1887.

A Case of Feigned Disease in a Child of Ten Years.—Dr. Antonin Martin reports a case in which he was called to treat a boy, 10 years of age, who stated that his school master had kicked him in the right groin four days previously. Dr. Martin found the

patient suffering acutely, his features being pale and contracted. Without examing the parts his parents had applied poultices, but his sufferings becoming more acute, medical aid was sought. No trace of ecchymosis could be found on the affected part, but a very The prepuce formed an decided paraphymosis was discovered. enormous hood red, shining and very painful behind the swollen glans. Gentle attempts at reduction were made, but the child was intractible as the suffering was severe. In the absence of assistance operation was deferred to the following day. A fomentation of marsh mallow and poppy was ordered; with inunctions to the penis of an ointment of cocaine (1 in .25:10); and syrup of chloral. The following day the child was suffering less. Under chloroform, having first coated the glans and prepuce with a strong ointment of cocaine, reduction was promptly effected by Alphonse Guérin's method. Next day the little patient was quite happy, the swelling and pain of the prepuce had almost disappeared. Inquiring, under threat of sending him to the hospital, Dr. Martin ascertained that there was no truth whatever in the alleged assault, the accident occurring, as often happens in children, from the prepuce having been retracted and allowed to remain until swelling prevented its reduction.—L'Union Medicale, August 6, 1887.

TREATMENT OF DIPHTHERIA.—Dr. J. SIMON—Applications repeated every hour or every two hours with lemon juice, simple or aromatic vinegar or even pure wine or with a very dilute solution of perchloride of iron or lemon. The patient, if of sufficient age, to gargle with one of the following solutions: boracic acid, 4 per cent.; lime water; vinegar and water; solution of chlorate of potassium, 4 per If the patient is too young to use a gargle, use lukewarm irrigations with a litre of dilute lime water or one of the preceding solutions. These bathings astringe the throat and ease the pain. On the neck to guard against congestion of the glands, apply an ointment of iodide of potassium as a resolvent; or a bandage of wadding on which has been spread an ointment of belladonna and hyoscyamus. Internally give the perchloride of iron in doses of 3 to 6 drops every two or three hours when liquid nourishment is taken. Dr. Simon uses freely, with patients over five years of age, the oleoresin of cubebs, in doses of 4 to 6 gm., in an aromatic draught, or the following preparation given as a bolus:

Cubebs, 30 gm.
Copaiba, 60 "
Subcarbonate of iron, 4 "
Subnitrate of bismuth, 90 "

It is important to watch the temperature and ventilation of the sick chamber. The air ought to be rendered warm and moist by means of antiseptic and aromatic sprays.—Nouveaux Remedes, August 24, 1887.

FEVER.—PROFESSOR AUSTIN FLINT summarizes his views contained in an address on fever delivered before the Ninth International Medical Congress, in the following propositions:

1. Fevers, especially those belonging to the class of acute diseases, are self-limited in their duration, and are due each one to a special cause, a micro-organism, the operation of which ceases after the

lapse of a certain time.

2. We are as yet unable to destroy directly the morbific organisms which give rise to continued fevers; and we must be content, for the present, to moderate their action and to sustain the powers of resis-

tance of patients.

3. The production of animal heat involves oxidation of parts of the organism or of articles of food, represented in the formation and discharge of nitrogenized excrementitious matters, carbonic acid and

4. As regards its relations to general nutrition and the production of animal heat, water formed in the body by a process of oxidation

is to be counted as an excrementatious principle.

5. Fever, as observed in the so-called essential fevers, may be defined as a condition of excessive production of heat, involving defective nutrition or inanition, an excessive production and discharge of nitrogenized excrementitious matters and carbonic acid, with waste and degeneration of the tissues, and partial or complete suppression of the production and discharge of water.

6. Aside from the influence of complications and accidents, the ataxic symptoms in fevers, the intensity and persistence of which endanger life, are secondary to the fever and are usually proportionate to the elevation of temperature. These symptoms are ameliorated by measures of treatment directed to a reduction of the general

temperature of the body. 7. The abstraction of heat by external cold and the reduction of temperature by antipyretics administered internally, without affecting the special cause of the fever, improve the symptoms which are

secondary to the pyrexia.

In health, during a period of inanition, the consumption of the tissues in the production of animal heat, is in a measure saved

by an increased production and excretion of water.

9. In fever, the effects of inanition, manifested by destruction and degeneration of tissues, are intensified by a deficient formation and excretion of water.

10 Alimentation in fever, the object of which is to retard and repair the destruction and degeneration of tissues and organs, is difficult mainly on account of derangements of the digestive organs; and this difficulty is to be met by the administration of articles of food easily digested or of articles in which the processes of digestion have been begun or are partly accomplished.

11. In the introduction of the hydrocarbons, which are important

factors in the production of animal heat, alcohol presents a form of hydrocarbon which is promptly oxidized, and in which absorption can take place without preparation by digestion.

12. Precisely in so far as it is oxidized in the body, alcohol furnishes matter which is consumed in the excessive production of heat

in fever, and saves destruction and degeneration of tissue.

13. The introduction of matters consumed in the production of heat in fever, diminishes rather than increases the intensity of the pyrexia.

14. As the oxidation of alcohol necessarily involves the formation of water and limits the destruction of tissue, its action in fever tends to restore the normal processes of heat-production, in which the for-

mation of water plays an important part.

15. The great objects in the treatment of fever itself are to limit and reduce the pyrexia by direct and indirect means; to limit and repair destruction and degeneration of tissues and organs by alimentation; to provide matters for consumption in the abnormal production of heat; and thus to place the system in the most favorable condition for recuperation after the disease shall have run its course.—Medical News, Sept. 10, 1887.

ANTIPYRIN IN MIGRAIN AND FACIAL NEURALGIA.—M. GERMAIN SEE reports his results with antipyrin in 42 cases of head pain from various causes, the ages varying from 18 to 44 years. The drug was given at the commencement of the paroxysm; 1 gm. on rising and repeated in an hour completely dispelled the attack. The remedy is administered in half a glass of water before or with the morning The pain diminishes in twenty or thirty minutes. Nothing is given in the intermissions; in most persons it gradually dispels the When the sufferers are subject to recurrent attacks, 1 gm. should be taken each day. In 38 of the 42 cases success was immediate and complete without any digestive, cardiac or cerebral derangement. In facial neuralgias and tics of a severe form which had existed for from twelve to eighteen years, M. See has had two cures, four improvements, which were equivalent to cures, one case only resisted treatment. The drug was given in daily doses of 5 gm. and upwards, by hypodermic injections, of the following solution: antipyrin, 0.50 cg.; water, 0.75 cg.; the addition of 1 cg. of cocaine to each syringeful, containing equal parts of water and antipyrin, makes the injection much more energetic .- L'Union Medicale, Aug. 25, '87.

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The Sacramento Medical Times.

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JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

SACRAMENTO: SEPTEMBER, 1887.

THE LAW AND THE ILLEGALS.

It will be recollected that about one year ago, J. H. Josselyn, Li Po Tai and P. R. McNulty were arrested in San Francisco for practising medicine without a license.* The charge against those first named was dismissed on the technical ground of an error in the complaint. The case against McNulty, after months of delay, reached trial in February of this year. The defense did not introduce a witness. The jury, having retired, came into Court for directions as to whether the twenty-one signs of "Doctor," which decorated the exterior of defendant's premises, constituted "publicly professing to be a physician." The Court instructed "that is a matter of fact for the jury to decide." The jury disagreed, standing eight for conviction, and was therefore dismissed.

In March another jury was impaneled and the case again tried. For the prosecution the testimony of a person for whom he had prescribed was submitted, also the fact of the numerous signs of "Doctor" without and within the building, with the general appearance of the premises, which implied that a person practising medicine was in occupation. The Court declared that it had not been proved that defendant signed himself "M. D." or "habitually prescribed for the sick," or "that he publicly professed to be a physician." The prosecution submitted decisions of the Texas Supreme Court laying down that prescribing on one occasion only, when taken with other facts, constitutes "habitually prescribing." The

^{*} McNulty had formerly held a license from the Homoeopathic Board, which was revoked for unprofessional conduct.

Court held that "it must be for the sick, and that the witness had testified that he was not sick; further, that the alleged signs only proclaim him a 'Doctor,' while he might be a horse doctor or a dentist." The previous ruling of the learned Judge, that the question of the signs was a "matter of fact for the jury to determine," was recalled, yet the Court instructed the jury to acquit, on the ground that the prosecution had failed to make out a prima facie case.

Defendant was again arrested in July, and on this trial was convicted, as we understand, against the direction of the Court. Application for a new trial was made and was denied, and defendant ordered to appear for sentence September 19th.* These trials were held before Police Judge F. A. Hornblower.

We are accustomed to such travesties of justice where matters involving legal technicalities are submitted to juries, but we are at a loss to understand the method of reasoning pursued by the Judge, who, on the second trial, reversed his own decision on a matter of fact, while on the second and third trials the Court (the case being exactly similar), could see his way to instruct the jury to acquit.

The defense had issued subpænas for the attendance of sixty-eight physicians, including the leading practitioners of San Francisco, not one of whom were put on the stand. This procedure bears a striking similarity to the case of an illegal practitioner arrested at Woodland, who subpænaed several physicians in San Francisco, and forces us to the conclusion that the object was to annoy the profession and thereby influence the case by discrediting the prosecution.

J. H. Josselyn, against whom the complaint was dismissed, on the ground of informality, has more recently been arrested on the charge of performing a criminal operation. Louisa Hagenow, who was convicted of practising without a license, and fined, at San Jose, will be compelled to stand trial on a

^{*} A further postponement was obtained till Sept. 24th.

similar charge. During the McNulty trial it was submitted in evidence that, for a consideration, the defendant would perform an abortion.

It would therefore appear that there is a strange similarity in the ways and methods of these illegal practitioners, which should at once remove their cases from the domain of popular sympathy and class them amongst the social pariahs whose exclusion from a community is from every point desirable. The San Francisco "Daily Examiner" deserves every praise for the part it has taken in exposing these rascalities, and we trust that it will continue in the good work until the city will be too hot for this criminal class. Meanwhile the legal practitioners of the State will watch the result of these trials with interest, and though the physician is not, as a rule, a factor in practical politics, the profession will do well to note those who are in sympathy with it, and those against.

THE CONTAGIUM OF SCARLET FEVER.

The report of the medical officer of the Local Government Board, England, for 1885 (published February, 1887), contained the report of Mr. Power on the Hendon Milk Scarlatina. The matter had been discussed in several numbers of the "British Medical Journal" in 1886. Mr. Power adduced in support of his theory numerous experiments by Dr. Klein which were strongly confirmatory. The effect of this was to imply that a disease existed in cows which was characterized by local and constitutional symptoms, which disease, if not identical with scarlatina in the human system, was capable of producing it in man. The statements naturally gave rise to criticism and comment, for the importance of the connection, if proved, cannot be overrated. The preponderance of testimony seemed favorable to the discovery, and at a later date the experiments of Drs. Jamieson and Edington

("British Medical Journal," August 20, 1887), gave fresh confirmation.

Dr. George Thin, in a "Critical Review of the Contagium of Scarlet Fever" ("British Medical Journal," June 11, 1887), traverses the whole ground from the first case seen at the Hendon farm to the latest experiments, and in a very lucid and able manner, brings the question to be viewed in another light.

As many of our readers are aware, the origin of an outbreak of scarlatina in the Parish of St. Marylebone, London, in December, 1885, was traced very distinctly to the milk supplied from a farm at Hendon; and at that farm to a certain shed the cows in which were suffering from an eruption on the teats and udders. No source of contamination could be discovered, and it was concluded, after investigation, that the disease in the animals had produced, through the medium of the milk, scarlatina in the consumers.

In rebuttal, Dr. Thin cites the following facts: The three cows originally affected had been bought from a dealer who sold some cows of the same lot to two other dairies. In each instance the disease spread amongst the stock, fifty cows in one case and twenty-five in the other, being affected. The eruption was similar in all the animals affected, and at every farm the hands of the men engaged in milking the cows had been attacked by the disease. Mr. Bate, a surgeon who attended two of the men, states that in neither instance nor in other cases which he had seen, was scarlatina developed. Regarding the results from the consumption of milk from these affected cows, on both of the farms last mentioned the cows were regularly milked, the milk being supplied in one instance to four hundred customers, in the other to seventy or eighty families, yet no case of scarlatina was discovered. Dr. Thin, in commenting upon sources of infection other than the cow, states that at the time of the Hendon outbreak, scarlet fever existed in the village of Child's Hill, and that two men employed as milkers at the infected dairy lived in this village, going to work each day. He also says, that dairymen are in the habit of adding a substance to the milk, called "color," which is mixed in by stirring with the naked hand in the milk can.

In a series of experiments performed by Dr. Klein streptococci, obtained from ulcers of one of the Hendon cows, when inoculated on calves produced a similar disease. The micrococcus was found not only in the tissue surrounding the ulcers, but also in the internal organs of two calves. Dr. Klein states that in the blood and tissues of scarlatinal patients a microbe is found which is identical with the micrococcus present in the cow. Also, that "mice or calves fed with cultures of this coccus became affected with cutaneous and visceral disease similar to human scarlet fever, and that from the blood and tissues of animals infected by these cultivations the same micrococcus was recovered."

Dr. Thin finds that there is no proof that this coccus has produced scarlatina in man, nor that the disease which it has produced in animals by inoculation is scarlatina in any form. He also finds a striking similarity between this coccus and the streptococcus pyogenes of Fluegge in its general character and mode of growth. While asserting that the crucial proof that organisms are the cause of a disease is that this disease is produced by subcultures of the organisms, Dr. Thin would, in this case, be satisfied if it could be shown that the organism was always present in the scarlatinal blood and tissues and nowhere else; but he believes that we are an immeasurable distance from this point. He admits that "it is quite clear that the organism experimented with by Dr. Klein is capable of producing metastatic inflammation in the organs, and symptoms of general blood poisoning. But these results are not peculiar to scarlet fever, although they may be found in the bodies of persons who have died of it. They are the general symptoms of blood poisoning, and modern

research shows that bacterial poisons generally underlie them."

Dr. Thin does not believe that the changes in the skin, either in color, loss of hair or desquamation can be taken as even confirmatory evidence, as each may be accounted for by other conditions. The post-mortem appearance of the kidneys in the animals experimented on were stated by Klein to "completely coincide with those in acute scarlatinal nephritis in man." Dr. Thin says that the poison of scarlatina produces inflammation in certain elements of the kidney; the micrococci employed by Klein also produced inflammation, but in neither was there any specific character, he adds, that inflammation in the kidney in animals does not identify the disease with scarlatina any more than with variola or septicæmia.

Dr. Edington describes a "bacillus scarlatinæ," which is present in the blood of scarlatinal patients in the early stages of the disease, and in the desquamation of the later stages, but not present here before the end of the third week. This bacillus, when inoculated in young rabbits, produced slight but well marked erythema, the cuticle afterwards desquamated and the animal had fever, the bacillus could be obtained from the animal's blood. Inoculation was fatal to a calf with sickness and fever. Dr. Thin says: "there can be no doubt that Dr. Edington has isolated from the blood of scarlatina a bacillus which, when injected into animals, makes them ill and may kill them; that some of the symptoms in these animals are erythema and desquamation of the skin, and that when the disease is fatal the viscera show a general state of blood poisoning. But it by no means follows because an animal, when feverish, has more or less erythema of the skin with subsequent desquamation, that therefore it is suffering from scarlet fever." He concludes that before it can be accepted that Dr. Klein's or Dr. Edington's organisms are the cause of scarlatina, there are sufficiently important lacunæ

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to be filled up. It must be shown that the isolated organisms are capable of producing scarlatina in man. Experiments on animals must show that the latter are capable of developing scarlet fever. This would be done if a disease were produced in them, bearing so striking a resemblance to scarlatina as would satisfy the demands of clinicians, or if it were shown that scarlatina was communicated by animals suffering from the effects of injections of these organisms. Lastly, if sick animals communicated scarlatina to human beings, and if in these animals and in the human beings a pathogenic organism was found which, in its characters, could be distinguished from all other organisms. None of these criteria are, he says, so far satisfied.

The question has now reached a stage where further observation and the results of investigators will be awaited with much interest. In this connection the relation between a diseased condition in pigeons and the subsequent occurrence of diphtheria in the same locality, which has recently been traced, may throw further light on the subject. While with scarlatina and diphtheria more conclusive evidence is required, there is no reason to reject the hypothesis as untenable when other diseases as tuberculosis are known to be common to man and the lower animals.

THE INTERNATIONAL MEDICAL CONGRESS.

The Ninth International Medical Congress, which closed at Washington on September 10th, has been as successful in point of attendance and in the general excellence of the work performed as any which have been held in previous years.

The total number of members registered was about 2600, of whom 184 were from abroad. The foreign contingent was not large, but it must be remembered that the trip to America occupies considerable time, and is apparently more formidable than a journey between any two points in Europe.

The rank and file of the profession at home was well represented, and the credit of American medicine was ably sustained by many excellent papers. It is to be regretted that several of the acknowledged leaders in medicine and surgery were absent, and it will be inferred that this fact, so well and often announced beforehand, may have influenced intending visitors. The unfortunate dissensions which have taken place, and the persistent wrong headedness which has characterized eminent members of the profession, is now, happily, a thing of the past, and it will be a source of gratification in the future to those who have worked so ably and so hard to look back on the most successful session which has just closed.

The opinions of the medical press are varied and interesting, yet the Congress has not suffered at its hands. The "Medical Register" has fulfilled its promise of issuing a daily edition, and has presented five excellent numbers. The "Medical Record" has an admirable report (advance slips of which were furnished to its exchanges) occupying eighty of its pages. The "Medical News" also gives a full report of the proceedings.

NOTES.

Transmission of Tuberculosis by Wine.—M. Galthier has investigated ("Progrés Médical") the employment of fresh blood in the clarification of wines, with a view to ascertaining the possibility of the transmission of tuberculosis to man. He states that the blood of tuberculous animals is always virulent. Alcoholic liquors, wines which show 6 to 12 per cent. of alcohol, sterilize the germs contained in blood employed to clear them. Answering the question, whether there is then any danger in the use of the wines, he says the tuber cular virus resists the action of alcohol for a certain period. Inoculation with tuberculised wines gives no result after a year, a month, fifteen days, or even four days, from the addition of the tuberculous matter; but when tuberculised wines of some hours, or two or three days are used, inoculations have caused tuberculosis in the rabbit.

OVARIOTOMY IN AMERICA.—In connection with the early history of this operation some interesting experiences were related before the Section of Obstetrics of the International Medical Congress. Dr. Alexander Dunlap, of Springfield, Ohio, read a paper on "The Early History of Ovariotomy in America." He describes his first case of ovariotomy in 1843; he invited ten of his medical friends to witness the operation. They declined, saying that they could see enough people die without seeing them killed. One of them presented himself at the time. He was an old retired army surgeon, who was addicted to drinking. With this assistant and four students he operated, first giving the patient a teasponful of laudanum, after which he went to work. She died on the twentieth day, evidently from excessive drainage from the kidneys. There was no septicæmia. Dr. Kimball, of Lowell, Mass., reported the first case in which he had operated, thirty-five or forty years ago. He invited ten physicians. During the operation he met with considerable difficulty in the form of nine cysts, and when he looked about for his assistants they had all left but one.

CHLOROFORMING PERSONS DURING SLEEP.—In connection with a recent trial in this city; where the use of chloroform by the defendant was suggested and the probabilities of its successful administration discussed, the following extract from an editorial in the "New Orleans Medical and Surgical Journal" is of interest:

"The weight of chloroform vapor, and the readiness with which it descends, make it difficult to saturate the air of a sleeping apartment, especially one at the time well ventilated. Besides, the quantity of chloroform necessary to saturate the air sufficiently to produce anæsthesia is very considerable. Allowing one and a half grains of chloroform to the cubic inch of air, it would require thirty-eight fluid ounces of chloroform to sufficiently impregnate the air of a room ten by twelve feet, with a ceiling eight feet high. It would certainly take a considerable time, too, to vaporize this quantity of chloroform. Even if the saturation of the air of a room were possible without awakening the sleepers, what would protect the burglars themselves

from the all-pervading soporific influence?"

In this connection it is interesting to note an observation by the late John Snow, which Dr. B. W. Richardson mentions in a biographical sketch contained in the last number of the "Asclepiad." The "Prevention of Offenses Bill" was before Parliament in 1851. A clause in the bill provided for severely punishing any person a lministering chloroform or other stupefying drug for unlawful purposes. Dr. Snow opposed the bill on the ground that "if it became law numerous frivolous and false charges would be constantly brought up against innocent persons or against guilty persons, but persons not guilty of the special charge laid against them, that namely of administering a volatile narcotic by inhalation. Knowing that weakness of human nature which leads a man, in the presence of all evidence, never to admit intoxication as possible in his own proper person, Dr. Snow felt that in any case where an intoxicated person had been robbed, such person might allege that he had been made insensible by narcotic vapor."

FEES IN VENEREAL CASES .-- In recent numbers of the "Medical Record," the question of fees in venereal cases has been discussed. The "Record" stated that "the physician has no right to judge or punish by charging a higher fee for treating venereal than for treating other diseases. Indeed, the laying down of rules for the taking of a retainer in one disease and not in another, is wrong, and the custom should be abolished." Also, that "the feeling which physicians have, however, that fees for treating venereal diseases should be ample and should be promptly paid is a justifiable one. It is impossible to regard the man sick from an expensive debauch with exactly the same feelings as we do a man who gets ill while working for the support of his family. The sexual passion is normal, but man distinguishes himself from the brute by controling it." The "Medical Press and Circular" comments severely on what it denominates "a custom which carries with it so much that is undignified for a great profession," and it regards the "Record's" argument as "nothing but a specious excuse for a form of professional robbery, which nothing in the ethics of medicine can extenuate if principles find their right application." The question is less one of sentiment or ethics than one of practical finance. That the afflicted ones who "waste their substance in riotous living" are "bad pay" is notorious, and where the sufferer or culprit, for we feel that the terms are interchangeable, is not known to the physician, or has no certain or visible income, it is idle to treat him as a pay patient until a moneyed transfer has taken place. The Sacramento Society for Medical Improvement in its fee bill lays down distinctly that the fees for venereal cases, \$25 to \$100, are payable always in advance, and we believe that the usage is very general. The rule is undoubtedly a good one, and its enforcement will not be calculated to wound the dignity of the practitioner or the dignity (?) of the applicant.

SPECIAL CORRESPONDENCE.

NEW YORK.

FROM OUR OWN CORRESPONDENT]

College of Physicians and Surgeons, New York—Report of the Committee of the State Board of Charities—American Gynæcological Association.

On the 2d of October the Session of 1887-8 of the College of Physicians and Surgeons will be opened at the beautiful and commodious new buildings provided by the liberality of the Vanderbilt

family. The property embraces fifty-nine contiguous city building lots, and is situated between Ninth and Tenth avenues, Fifty-ninth and Sixtieth streets, directly opposite the Roosevelt Hospital, an institution in which the positions on the visiting medical and surgical staff are, for the most part, held by the professors in the College. The buildings consist of the college building proper, the Vanderbilt clinic and the Sloane Maternity Hospital; the latter being erected and endowed by Mrs. W. D. Sloane, a daughter of the late Mr. W. H. Vanderbilt, and her husband. The college building proper consists of three divisions, the principal of which extends 140 feet along Fifty-ninth street, and the whole covers an area of 15,428 square feet. It is well lighted and ventilated throughout, and is admirably adapted in every way for the purposes for which it is designed; embracing lecture, recitation, reading, smoking and dissection rooms, the museum, the Swift physiological cabinet, professors' private work-rooms and laboratories of every variety. The public dissecting-room, which is situated on the fourth and highest floor of the southern or main division of the building, is lighted entirely from above in the daytime, and by the electric light in the evening, contains thirty-six tables, at which 180 students can dissect at once. About this large room are grouped smaller apartments for private dissection, for the teaching of operative surgery upon the cadaver, and for the preparation of material to illustrate the lectures upon anatomy and surgery. The northern portion of the building, three stories in height, is nearly all devoted to laboratory purposes, and the middle building contains the two large lecture-rooms of the College. The lower of these lecture-rooms will hold nearly 450 students, and the upper more than 450; both are lighted in the evening by the electric light, and neither one contains columns or chandeliers to interrupt the view. The upper lecture room is a semi-circular theatre, in which the rows of seats rise steeply, and it is provided with a very spacious skylight.

The Vanderbilt clinic, built and endowed by the sons of the late Mr. Vanderbilt as a memorial of their father, is also furnished with a large lecture-room, and provides a fully equipped dispensary service, together with every facility for extended and practical clinical instruction and research in the various departments of medicine. The Sloane Maternity Hospital contains thirty free beds. The lying-in service is under the direction of the Professor of Obstetrics; the resident staff will be appointed from among the graduates of the College, and members of the graduating class will be permitted to

attend a certain number of cases of labor in the hospital.

The college year will consist, as heretofore, of a single session of seven months, with short vacations at Thanksgiving and Christmas, and, after the present session, applicants for matriculation will be required to undergo examinations for admission, except in the cases of those who can present certificates or diplomas indicative of their

proficiency in those branches of knowledge included in the prelimi-

nary examination prescribed by the College.

The College of Physicians and Surgeons now has to mourn the decease of one whose name has lent lustre to its history, and has long been a household word in American medicine, Dr. Alonzo Clark. Several years ago, however, Dr. Clark was retired as emeritus professor of pathology and the practice of medicine, and for a considerable time back his growing infirmities, which unfortunately included an impairment of his mental powers, compelled him to give up professional work altogether. On one occasion, when Dr. Clark was asked for what one special thing he would like to be remembered in his medical career, he replied: "For having given fresh air to typhus fever patients."

The hospital clinics have already been resumed after the summer vacation, and, at a recent one at the New York Hospital, Dr. Wm. T. Bull, Adjunct Professor of Surgery at the College of Physicians and Surgeons, had an unusual number of serious and comparatively rare operations; the list comprising extirpation of the larynx, nephrectomy, gastrotomy for foreign body in the esophagus, and a plas-

tic operation on the chest and head.

The report of the committee of the State Board of Charities which, during the past summer has been making an investigation of the condition and administration of the City Insane Asylum on Ward's Island, shows beyond question the existence of many abuses for which the Commissioners of Charities and Correction are mainly responsible. The medical board have done all in their power to ameliorate the condition of the patients, but the criminal overcrowding, the improper food supplied and the insufficient number and incapacity of the attendants are matters which demand a radical reform in the management.

The twelfth annual meeting of the American Gynæcological Association, which was held at the Academy of Medicine in this city on the 13th, 14th and 15th of September, was a very successful and interesting one, and was made all the more attractive by the presence of a number of distinguished foreign gynæcologists who had been in attendance at the International Medical Congress at Washington. Among the papers read was one on the Treatment of the Pedicle after Supra-vaginal Hysterectomy, by Dr. George Bantock, of London.

NEW YORK, Sept. 15, 1887.

BOOKS AND PAMPHLETS RECEIVED.

The Transactions of the Medical Society of the State of California, Session of 1887.

The annual volume of Transactions, which has just been issued from the press of W. B. Bancroft & Co., is a handsome volume of

434 pages. The paper is good, the typography clear and free from errors, and from every point the work is most creditable to the Committee on Publication. Of the many excellent papers presented we can only allude to the expert medical report on one hundred and fifty-eight inmates of the Institution for the Deaf and Dumb and the Blind at Berkeley, by A. Barkan, M. D., and the report of the Special Committee on Leprosy, W. F. McNutt, M. D., Chairman.

The former report consists of an elaborate analysis of the cases examined and a series of tables, which will be useful for purposes of

reference and investigation.

Dr. McNutt's report is undoubtedly one of the most valuable that has ever been presented to the Society. It is accompanied by a supplemental report by A. W. Saxe, M. D. The chairman placed himself in communication with practitioners resident at most of the endemic seats of the disease, and received a series of replies containing a vast amount of practical information. He finds that there is an "overwhelming preponderance of testimony in favor of the contagiousness of leprosy, and, taking into consideration the close commercial relations which exist between California and countries where leprosy is endemic, San Francisco being, in fact, the great gateway to the United States from Asia and Polynesia, it seems to your committee that we owe it as a duty, not only to ourselves but to this great nation, to be watchful and not allow leprosy to get a foothold amongst us." The committee recommends:

1. That a strict quarantine be established against leprosy, and that all lepers attempting to enter this country be returned to

whence they came.

2. That those already here, or that develop here, be rigidly segregated. We suggest that a contract be made, if possible, with the Hawaiian Government to have all Chinese lepers cared for at the leper settlement in Molokai. In this connection we wish to enter our earnest protest against the use of the smallpox hospital as a leper hospital. It is an outrageous shame that any one who may be unfortunate enough to be stricken down with smallpox and removed to the hospital, should, in addition, be exposed to the contagion of leprosy. The failure to provide a special place for the segregation of the those afflicted with leprosy we cannot but regard as criminal neglect.

3. That the bodies of deceased lepers be cremated or buried in lime, as suggested by Dr. Arning, and their personal effects destroyed.

A Page in the History of Ovariotomy in London. By T. W. Nunn, Consulting Surgeon to the Middlesex Hospital. London: Duncan McDonald.

Thoracic Aneurism, with a Case of Dissecting Aneurism of the Surface of the Aortic Arch. By H. P. Wenzel, M. D. [Reprinted from the "Chicago Medical Journal and Examiner."]

Licentiates of the Board of Examiners.

At the regular meeting of the Board of Examiners held August 3, 1887, the following physicians were granted certificates to practise medicine and surgery in this State:

Henrietta Brown, San Francisco; Minnesota Hosp. M. Coll., Feb. 28, '86.

Jose Reyes Bruciago, San Francisco; Board of Public Instruction,

City of Mexico, Nov. 11, '81.

Thos. A. Crowell, Los Angeles; Jefferson M. Coll., Penn., Mar. 11,'75. Robt. B. Davy, San Diego; Jefferson M. Coll., Penn., Mar. 7, '68. Hiram Duncan, Dixon; Coll. of Phys. and Surgs., Iowa, Feb. 17,'76. Wilson Peter Kern, Nordhoff; Univ. City of New York, Mar. 6, '86. George Wild Linn, Los Angeles; M. Dep. Univ. of Penn., Mar. 12,'72. Emma L. S. Merritt, San Francisco; M. Dep. Univ. of Col., Mar. 7, '81. Geo. M. Merrit, San Francisco; M. Dep. Univ. of Col., Nov. 10,'82. Geo. H. Mitchell, Phœnix, A. T.; M. Dep. Univ. of Penn., Mar. 14,'61. John Resley, Pasadena; Ohio M. Coll., Mar. 5, '44.

Augustus Francis Schafer, Gilroy; Bellevue Hosp. M. Coll., N. Y., Mar. 14, '87.

Will L. Wade, Los Angeles; M. Coll. of Indiana, Feb. 28, '79. Reinhard Weringh, Alhambra; Rush M. Coll., Ill., Feb. 21, '82. Horace B. Wing, Los Angeles; Chicago M. Coll., Ill., Mar. 29, '87.

At the regular meeting held Sept. 7, 1887, the following were granted certificates:

Henry B. Bessac, San Diego; Univ. of Mich., Mar. 26, '73.

F. R. Burnham, San Diego; Detroit M. Coll., Mich., Feb. 28, '77.

Albert V. Gates, Ono, Shasta Co.; Jeff. M. Coll., Pa., Mar. 11, '70.

W. Scott George, Monrovio; Kentucky School of M., June 30, '87.

John R. Haynes, Los Angeles; Univ. of Penn., Mar. 12, '74.

Francis L. Haynes, Los Angeles; Univ. of Penn., Mar. 14, '71.

Robt. W. Haynes, Los Angeles; Univ. of Penn., June 15, '81.

J. A. Landis, San Diego; M. Dep. Univ. of Nashville, Tenn., Mar. 1, '60.

T. J. McCoy, San Diego; Kentucky School of M., June 29, 80. Fred. P. Muffe, San Francisco; Univ. City of New York, Mar. 8, 87. G. Walter Otto, San Francisco; Univ. Leipzig, Germany, Aug. 4,'77. Sherman H. Washburn, Elsinor; Detroit M. Coll., Mich., July 10,'72. Hal. M. Wyman, Los Angeles; Mich. Coll. of M., Mar. 3. '83.

The application of Luther M. Davis, of Walla Walla, W. T., Joplin Coll. of Phys. and Surgs., was rejected on account of "insufficient credentials." The Board, together with the State Board of Illinois, refusing to recognize the diplomas of said institution.

The application of J. H. Patty, of San Francisco, holding a diploma from the Kansas City Coll. of M., Mo., was rejected on the same grounds.

WM. M. LAWLOR, Secretary.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT OF THE U.S. ARMY (DIVISION OF THE PACIFIC), FROM AUG. 20 TO SEPT. 20, 1887.

Upon recommendation of the Medical Director of the Department, leave of absence for one month, with permission to apply to the proper authority for an extension of one month, is granted Assistant Surgeon W. B. Banister, to take effect upon arrival at Fort Lowell, of Assistant Susgeon J. B. Girard. S. O. No. 91, Dept. Arizona, August 29, 1887.

The journey performed by Assistant Surgeon Leonard Wood, from Fort Huachuca, A. T., to these headquarters, in compliance with telegraphic instructions of the 31st of August, ultimo, is approved and confirmed as necessary for the public service. S. O. No. 94. Dept. Arizona, September 9, 1887.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS, U. S. NAVY (PACIFIC STATION), FROM AUG. 20 TO SEPT. 20, 1887.

Medical Director Albert L. Gihon granted leave of absence for one month, from September 1st, for the purpose of attending the International Medical Congress, at Washington, D. C., and assume the duties of Chairman of the Section on Climatology.

Public Health.

Reports from Cities on the Pacific Coast of 10,000 inhabitants and upwards, for the Month of August, 1887.

CITIES.	Population.	Annual Rate per 1000 for the month.	Total Deaths.	Zymotic Diseases.	Constitutional Diseases.	Local Diseases.	Developmental Diseases.	Violent Deaths.	Natural Causes.	Unclassified.
Los Angeles	60,000	9.40	47	8	8	11	9			11
Oakland	49,000	9.79	40	7	9	20	3	3		•••
Sacramento	30,000	14 80	37	9	7	12	2	4		4
San Francisco	280,000	17.50	409	59	72	211	28	24	15	
San Jose	20,000									
Stockton	15,000	5.60	7	. 1	3	2	1			

Meteorological Summary for the Month of August, 1887.

STATIONS.		TEMPERATURE	RATURE.	4	RAIN	RAINFALL.	No.	WEATHER.	ER.	WIND.	FURNISHED BY.
3 (3) 3 (3) 4 (3) 4 (3) 4 (3) 4 (3)	Highest.	Lowest.	Mean.	daily Range.	No. days Rain fell	Total Rainfall.	Clear.	Fair.	dy.	ing direction	
Auburn, C	Cal 98.0	52.0	72.5		1901 Da	T*	1.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ਲ.	Southern Pacific Co.
Colfax,	" 97.0	51.0	71.7			.00	1	1	1	Z.	" "
Eureka,	1	1			1	4	1	1			Signal Service U.S.A.
Los Angeles,	" 93.6	52.1	68.5	25.1	0	.00	11	20	0	W.	" "
Monterey,	" 74.0	54.0	62.1		0	.00	1	1	100 844	S. E.	Southern Pacific Co.
Dakland,	" 79	51	58.5	12.0	0	.00		1	4	W.	J. B. Trembley M. D
Paso Robles,	" 102.0	47.0	69.0	1	0	.00	1	1	1	Š	Southern Pacific Co.
Red Bluff,	10				1			1	1		Signal Service U.S.A.
Sacramento,	" 99.7	48.0	69.1	33.0	L	T*	31	0	0	Š	" "
an Diego,	" 77.2	54.0	66.2	8.8	ш	T*	ယ	25	ယ	N.W.	, ,,
an Francisco,	" 73.8	48.7	56.3	13.5		.01	9	13	9	W.	
Santa Barbara,	" 81+	53+		15.1	0	.00	28	22	1	W.	Hugh D. Vail, Esq.
Santa Cruz,	" 80.0	51.0	62.3		0	.00	1	1	1	W.	Southern Pacific Co.

Dash (——) indicates reports missing.

FAIR DAY—One on which cloudiness is 3 or less on a scale of 10.

CLOUDY DAY—One on which cloudiness is over 7.

* T trace of rain.

† Mean of that day 69.7°

+ 62.°